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TITLE : CUTTING TOOL MADE OF COMPOSITE CERMET, EXCELLENT IN WEAR RESISTANCE

ABSTRACT : PROBLEM TO BE SOLVED: To provide a cutting tool made of composite cermet, excellent in wear resistance and capable of showing superior machinability over a long period.

SOLUTION: The cutting tool made of composite cermet is constituted of a composite cermet having a structure which is composed, in respect of microstructure, of a spotted phase and a continuous phase of skeleton structure existing among the spotted phases and in which the spotted phases have ≤200μm size by measurement by longest diameter and also the amount of the spotted phases of 40-200μm comprises 10-50 area % of the total amount (the whole) with the continuous phases. Further, the spotted phase is constituted of a titanium carbonitride type cermet having a composition consisting of 5-20wt.% of Co and/or Ni as binding-phase-forming component and the balance essentially, as dispersed-phase-forming component, a Ti type compound carbonitride solid solution of Ti and one or more elements among Nb, Ta, W, Mo, Zr, V, Cr, and Hf. Moreover, the continuous phase is constituted of a cemented carbide having a composition consisting of 5-20wt.% of Co and/or Ni as binding-phase-forming component and the balance essentially tungsten carbide as dispersed-phase-forming component.